

KONISHI
Appl. No. 10/799,639
November 22, 2006

AMENDMENTS TO THE DRAWINGS:

The attached 13 sheets of formal drawings including Figures 1-20 replace the 13 sheets of informal drawings including Figures 1-20 filed with this application.

REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-4, 11-13 and 16-20 and 25-26 are now pending. Non-elected claims 6-10, 14-15, and 21-24 have been canceled without prejudice or disclaimer. Applicant reserves the right to file a divisional application directed to the subject matter of these non-elected and now canceled claims.

Original claims 1 and 4 were rejected under 35 USC 102(b) as being anticipated by Schwegler et al. Applicant respectfully traverses this rejection.

Referring to illustrated example embodiments without limiting the invention thereto, in an example embodiment of the invention as defined by claims 1, 11 and 16, a plate spring 28 is provided to urge valve member 32 into abutment with the valve seat 34 to close the seat opening 40. The use of a plate spring as recited in claims 1, 11 and 16 provides a simplified structure and decreases the size of the fuel pressure regulator 18.

In an embodiment of the invention, as defined by amended claim 1, the installation of the plate spring is achieved by crimping the periphery of an outlet end 39 of housing 38 to nip the periphery of the plate spring so as to allow the valve member to be moved away from the valve seat to open the seat opening 40 of the seat member 42 when the pressure of the fuel flowing through the flow path of the seat member is higher than a preselected limit level, thereby discharging and returning an excess of the fuel to the fuel tank 10 to regulate the pressure of the fuel delivered to the internal combustion engine. Thus, claim 1 specifically refers to crimping of the housing whereas claims 11 and 16 refer to the retention of the periphery of the plate spring so as to be stationary. The recited structure maintains an area of a center of the plate spring 28 expandable in a direction substantially perpendicular to the thickness of the

plate spring, thereby ensuring the stability of abutment of the valve member 32 with valve seat 34, to enhance the controllability of the pressure of the fuel to be delivered to the engine.

Anticipation under Section 102 of the Patent Act requires that a prior art reference disclose every claim element of the claimed invention. See, e.g., Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1574 (Fed. Cir. 1986). While other references may be used to interpret an allegedly anticipating reference, anticipation must be found in a single reference. See, e.g., Studiengesellschaft Kohle, G.m.b.H. v. Dart Indus., Inc., 726 F.2d 724, 726-27 (Fed. Cir. 1984). The absence of any element of the claim from the cited reference negates anticipation. See, e.g., Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 715 (Fed. Cir. 1984). Anticipation is not shown even if the differences between the claims and the prior art reference are insubstantial and the missing elements could be supplied by the knowledge of one skilled in the art. See, e.g., Structural Rubber Prods., 749 F.2d at 716-17.

Schwegler does not teach or in anyway suggest a plate spring as now more specifically recited in claim 1, much less a plate spring retained by a crimped end of a housing. It is therefore clear that claim 1 is not anticipated by nor obvious from Schwegler.

Original claims 1, 2, and 4 were rejected under 35 USC 1202(e) as being anticipated by Bueser et al. Applicant respectfully traverses this rejection.

Bueser discloses a pressure regulator wherein a leaf spring is provided for urging the valve member against the valve seat. Leaf spring 22 does not comprise a plate spring much less a plate spring that is retained at its peripheral edge, e.g., by being crimped to a housing. Because there is no retention of the outer peripheral edge of leaf spring 22, it cannot properly be said to correspond to the plate spring of applicant's

amended claim 1. It is therefore respectfully requested that this rejection be withdrawn.

Claims 3, 5, 11, 12, 16, 17, 18 and 19 were rejected as unpatentable over Schwegler as applied to claims 1 and 4 and further in view of Schulz et al. Applicant respectfully traverses this rejection.

As noted by the Examiner, Schwegler does not teach or suggest an urging member in the form of a plate spring. Quite the contrary, Schwegler discloses the use of a coil spring structure.

Schulz is cited as disclosing a plate spring. However, the fact that Schulz discloses the use of a plate spring does not *ipso facto* mean that it would be obvious to incorporate a plate spring in Schwegler. In fact, it is not evident how such a plate spring structure could be incorporated in Schwegler without a complete redesign of the Schwegler pressure regulating valve, which simply includes a coil spring for urging the valve member 20A against the valve seat. For example, it is not seen how a spring plate of the type Schulz teaches could be secured with respect to the columnar receptacle 14 of Schwegler. Clearly, then, the skilled artisan would use the structures of Schultz and Schwegler in the alternative and would not attempt a piecemeal combination of their teachings.

Section 103 does not allow the Examiner to engage in picking and choosing from the prior art only to the extent that it will support a holding of obviousness, while excluding parts of the prior art essential to the full appreciation of what the prior art suggests to one of ordinary skill in the art. In re Wesslau, 147 USPQ 391 (CCPA 1975).

As the CAFC has said, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital Systems v Montefiore Hospital, 221 USPQ 929, 933 (Fed. Cir. 1984). There must be a suggestion in the art

relied upon to use what one reference discloses in or in combination with the disclosure of the other reference or references relied upon by the Examiner. In re Grabiak, 226 USPQ 870, 872 (Fed. Cir. 1986).

The Examiner further suggests that Schulz teaches openings at 12d to establish fluid communication with the fuel tank. Applicant disagrees. In this regard it appears that the spring plate 12 of Schulz is embedded in membrane 6 (according to the cross-section of Figure 1) so that holes for passage of fuel as alleged by the Examiner would not exist.

For all the reasons advanced above, it is respectfully submitted that it would not have been obvious from the cited prior art to replace the coil spring of Schwegler with the plate spring of Schulz. Reconsideration and withdrawal of the Examiner's rejection are solicited.

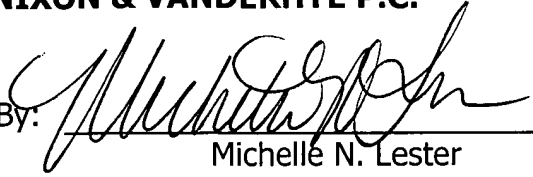
Applicant notes with appreciation the Examiner's indication that claims 13 and 20 contain allowable subject matter. New independent claims 25 and 26 correspond to original claims 13 and 20, re-written in independent form.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

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Respectfully submitted,

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